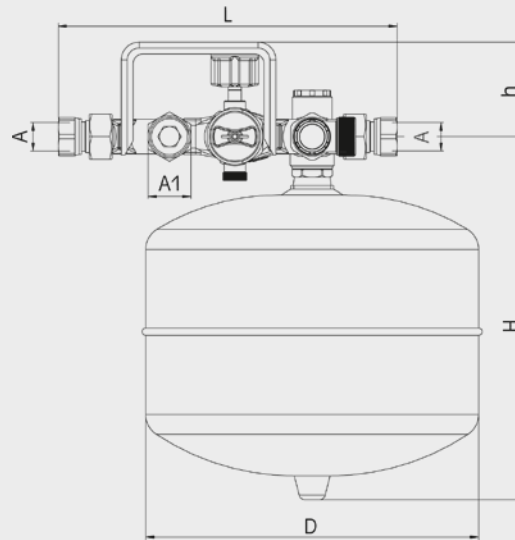


TANK ACCESSORIES

BOILER SAFETY CENTRE



DVGW certified



Nominal size	–	DN 20
	A	G ¾"
	A1	G 1"
Construction dimensions	L (mm)	285
	h (mm)	80–90 (adjustable)
	H (mm)	305 (12 l MAG), 385 (18 l MAG)
	D (mm)	280

Boiler safety centre

The boiler safety centre safeguards closed drinking water heaters to max. 560 l volume, in compliance with DIN 1988, part 2; DIN 4753, part 1; DIN 4807, part 5 and DIN EN 1488. It comprises all components that must be fitted on the input side of drinking water heaters as stipulated by DIN 1988 and DIN EN 1488. In addition, the equipment comprises a flow fitting with integrated maintenance shut-off as well as a flow through membrane expansion tank (MAG) with 12 l or 18 l nominal volume, in a compact format.

Specifications

Type	BCS-12l	BCS-18l
Item no.	1610488	1610489
Dimension	DN20	
Connection	G 3/4"	
Inlet pressure	10 bar in accordance with DIN EN 1488	
Operating pressure	Max. 80% of the response pressure from the safety valve	
Max. operating temperature	30 °C input temperature	
Response pressure	6, 10 bar using the supplied cartridges	
Component inspection no.	TÜV-SV-05-545-DN-W-p	
Installation position	any	
Flow rate	1.9 m³/h at 0.2 bar Δp/4.5 m³/h at 1.0 bar Δp	
ABP no.	PA-IX 7728/l	
DVGW no.	NW-6160AT2654	
Membrane expansion tank (MAG)	12 l	18 l
Safety valve response pressure	6 bar	10 bar
Max. drinking water heater volume	200 l	560 l

BOILER SAFETY GROUP

Version

The safety centre contains a connection for an additional cold water consumer appliance, a double shut-off with integrated testing potential for the return flow inhibitor, a return flow inhibitor, a safety valve with stainless-steel seat and discharge hopper, a flow fitting with integrated maintenance shut-off for the MAG as well as a mounting plate with differential coupling. The special layout of the group enables installation in an angular and straight pattern in horizontal and vertical lines. The membrane safety valve can be rotated by 360 degrees to accommodate different installation conditions. The mounting plate enables safe and time-saving installation. The safety centre is tested for sound insulation and complies with the requirements of sound insulation category 1.

Materials

The housing is manufactured using low-lead, dezincification-resistant red brass alloy. All consumables are made from stainless steel and all plastic parts under pressure are made from fibre-glass reinforced plastic. The membrane and sealing rings are manufactured using heat and ageing-resistant, rubbery-elastic plastic and the springs are cast from corrosion-resistant spring steel wire and stainless steel. The MAG is made from coated steel and the membrane of the MAG from NBR. All plastic parts which come into contact with drinking water comply with the German health authority's KTW recommendations.

Installation

Installation may occur either in the vicinity of the drinking water heater or in the area surrounding the front door installation. The house connection must be equipped with a filter and a pressure regulator. The preset response pressure must not exceed 80% of the response pressure from the safety valve. The complex installation for producing the necessary wall distance for the membrane expansion tank as well as the cumbersome attachment of the MAG using consoles and mountings are omitted by using the mounting plate. All flow directions are made possible due to the versatile installation options

Assembly

Pipework must be carefully flushed through prior to assembly. The fitting is then installed unstressed. A wall distance of 80 mm is achieved using the mounting plate contained within the scope of delivery. This measurement can be varied between 80 and 95 mm by using a differential coupling. The discharge hopper of the safety valve has a length adjustment which may be extricated by 20 mm. In place of the hopper, copper pipe (22 mm) is also used to extend the drain pipe.

Maintenance

The initial gas pressure in the MAG must be set to 0.2 bar below the static pressure of the installation. In order to guarantee the lasting operation of the safety centre, regular maintenance of the fitting components is required (see DIN 1988, part 8). Initial pressure checks and function checks should be carried out annually on the MAG and return flow inhibitor respectively. The safety valve can be lifted using the rotary handle. All individual components can be maintained or repaired without any difficulty due to the sensible design of the fitting.

Components

1) Replacement upper part

6 bar
10 bar

2) Stainless-steel seat

3) Membrane safety valve, complete

4) Pressure gauge plug

5) Double shut-off

6) Installation wrenches for replacement upper part

Max. starting torque 15 Nm

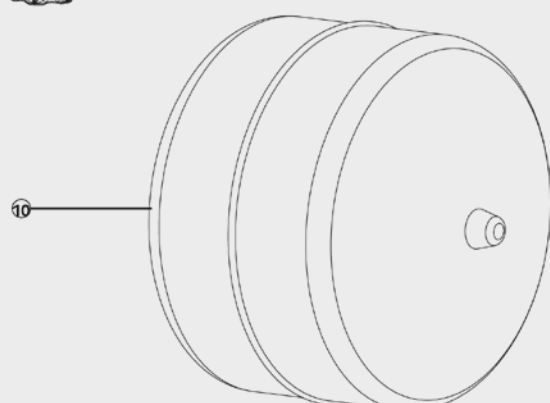
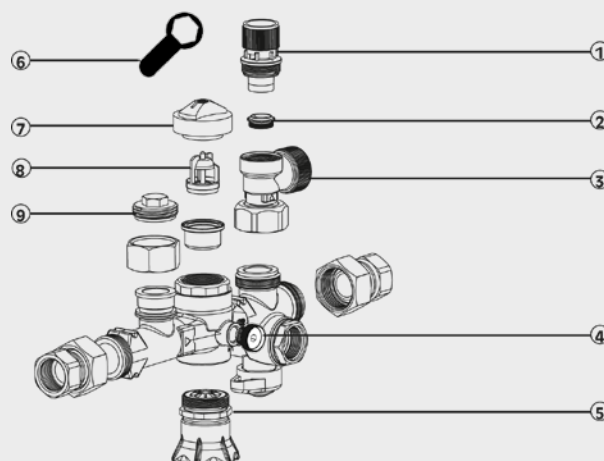
7) Maintenance cap

8) Return flow inhibitor

9) Plug

10) Membrane expansion tank

12 l
18 l



without illustration: discharge hopper to the safety valve